

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
STATEMENT OF INVESTMENT POLICY**

**FOR  
LOW DURATION FIXED INCOME PROGRAM**

**May 12, 2008**

*This policy is effective immediately upon adoption and supersedes all previous Low Duration Fixed Income Program, Dollar-Denominated Fixed Income Limited Duration Program, Dollar-Denominated Fixed Income High Quality Libor Program, Dollar-Denominated Fixed Income Short Duration Program, and Internally Managed Dollar-Denominated Short-Term Program policies.*

**I. PURPOSE**

The CalPERS Total Fund Statement of Investment Policy adopted by the CalPERS Investment Committee ("Committee"), sets forth CalPERS' overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the Low Duration Fixed Income Program ("LD Program"). The design of this Policy ensures that investors, managers, consultants, and other participants selected by the California Public Employees' Retirement System ("CalPERS") take prudent and careful action while managing the Programs. Additionally, use of this policy assures sufficient flexibility in managing investment risks and returns associated with this Program.

This Policy is the controlling document for the following Programs:

- A. Attachment A – Dollar-Denominated Fixed Income Limited Duration Program;
  - 1. Attachment A1 – Dollar-Denominated Fixed Income [High Quality LIBOR](#) Program ("HQL Program");
  - 2. Attachment A2 – Dollar-Denominated Fixed Income [Short Duration Program](#) ("SD Program"); and
  - 3. Attachment A3 – Eligible Repo Counterparties.
- B. Attachment B – Internally Managed Dollar-Denominated Short-Term Program ("ST Program"); and
- C. Attachment C – Short Duration Programs Comparison.

## II. STRATEGIC OBJECTIVE

The LD Programs shall be managed to accomplish the following:

- A. Diversify CalPERS overall investment programs;
- B. Dampen the overall risk of CalPERS' investment programs; and
- C. Enhance CalPERS' total returns.

## III. RESPONSIBILITIES

A. CalPERS' Investment Staff ("Staff") is responsible for the following:

- 1. All aspects of portfolio management and oversight including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
- 2. Reporting on the performance and risk metrics for each individual LD Program to the Committee, at least annually for externally managed, and quarterly for internally managed LD Programs.
- 3. Monitoring internal and [external managers](#) in the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of Policies at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of the violations and appropriate recommendations for corrective action.

B. The [General Pension Consultant](#) ("Consultant") is responsible for:

Monitoring, evaluating, and reporting at least annually, to the Committee, on the performance of the LD Programs relative to the appropriate benchmarks and the Policy.

## IV. PERFORMANCE OBJECTIVE AND BENCHMARK

The specific performance objective and benchmark for each LD Program is detailed in the appropriate attachment.

## V. INVESTMENT APPROACHES AND PARAMETERS

The specific Investment Approaches and Parameters for each LD Program are detailed in the appropriate attachment.

## VI. LIMITED DURATION INVESTMENT PROGRAM CHARACTERISTICS

Although both the HQL and SD Programs are designed to be limited-[duration](#) in nature, the two investment programs differ in their targeted investment horizon, program objectives, and expected program participants. While the HQL Program is an appropriate investment for numerous CalPERS sub-strategies, the SD Program is designed to be a slightly more aggressively managed limited duration program for participants having a longer investment horizon that allows for higher monthly return volatility in exchange for higher expected long-term alpha. For instance, the SD Program is viewed as an appropriate investment for the “core” portion of the securities lending assets.

Given the different investment time horizons, program objectives, and expected program participants, the investment policies that govern the two programs do have some major policy differences and multiple minor differences.

The following table summarizes the basic program characteristics.

	High Quality LIBOR	Short Duration Program
<b>Investment Horizon</b>	Less than 30 days	6 - 12 months
<b>Objective</b>	Medium / High Liquidity	Medium Liquidity
	Capital Preservation	Total Rate of Return
	Total Rate of Return	
<b>Participants</b>	Global Fixed Income	Securities Lending
	Domestic Equity	
	Securities Lending	
<b>Liquidity Requirement</b>	High	Medium
<b>Program Duration Constraint</b>	90 Days Max	180 Days Max
<b>WAL Constraint</b>		
<b>Fixed Rate Securities</b>	90 Days	2 years
<b>AAA-Rated <a href="#">Floating Rate Securities</a></b>	5 Years	7 Years
<b>Minimum Credit Quality</b>		
<b><a href="#">Structured Securities</a></b>	AAA	BBB

## VII. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis as recorded by CalPERS' [Custodian](#), unless otherwise provided in attachments.

## VIII. GLOSSARY OF TERMS

Key words used in the policy and attachments are defined in CalPERS' Master Glossary of Terms.

### Low Duration Fixed Income Program

Approved by the Policy Subcommittee: April 21, 2008

Adopted by the Investment Committee: May 12, 2008

**The following attachments were previously individual policies and are now consolidated into the Global Fixed Income Program policy. The dates below reflect the revision history for each document**

### Attachment A – Dollar-Denominated Fixed Income Limited-Duration

#### Dollar-Denominated Fixed Income Short-Duration

Approved by the Policy Subcommittee: June 13, 2003

Adopted by the Investment Committee: August 18, 2003

Revised by the Policy Subcommittee: June 11, 2004

Adopted by the Investment Committee: August 16, 2004

Name changed to Dollar-Denominated Fixed Income Limited-Duration

Revised by the Policy Subcommittee: December 9, 2005

Adopted by the Investment Committee: February 14, 2006

### Attachment B – Dollar-Denominated Short-Term Program – Internally Managed

Approved by the Policy Subcommittee: September 27, 1996

Adopted by the Investment Committee: November 18, 1996

Revised by the Policy Subcommittee: June 11, 2004

Adopted by the Investment Committee: August 16, 2004

**DOLLAR-DENOMINATED FIXED INCOME  
LIMITED-DURATION PROGRAM**

**May 12, 2008**

**I. DOLLAR DENOMINATED FIXED INCOME, LIMITED DURATION  
INVESTMENT PROGRAM**

- A. The [High Quality LIBOR](#) Program (“HQL Program”) is designed to be a limited [duration](#), highly liquid program that can be used by CalPERS’ Portfolio Managers as a way to invest in a limited duration asset that provides low volatility versus a floating-rate based benchmark.
1. Uses for the HQL Program include, but are not limited to:
    - a. a stand-alone asset in the fixed income mortgage portfolio as a proxy for high coupon mortgage pass-throughs;
    - b. an asset in the securities lending portfolio that will be managed internally;
    - c. the cash component of mortgage dollar roll transactions;
    - d. the cash component of [interest rate swap](#) transactions; and
    - e. the cash component of the Equity Dynamic Completion Fund transactions.
  2. The Policy for the HQL Program is Attachment A1.
- B. The Short Duration Program (“SD Program”) is designed to earn a return premium versus traditional limited duration assets through a modest increase in portfolio duration and by purchasing a broader universe of limited duration [securities](#) than those typically available to traditional money market portfolios. Expanding the allowable universe of limited duration securities provides the opportunity to increase return by taking advantage of some structural aspects inherent in the limited duration sector. Traditionally there are three strategies that provide incremental alpha opportunities for limited duration investors. These strategies include extending duration out the [yield curve](#), accepting lower liquidity, and investing down the credit spectrum. The SD Program will be designed to take advantage of all three strategies, as well as other strategies that add incremental value, within a controlled manner and will result in a modest increase in risk relative to the HQL Program.

1. Uses for the SD Program include, but are not limited to:
  - a. the “core” asset of the internally managed securities lending portfolio;
  - b. a stand-alone asset in the fixed income mortgage portfolio as a proxy for high coupon mortgage pass-throughs; and
  - c. the cash component of mortgage dollar roll transactions and interest rate [swap](#) transactions.
2. The key determinant for the use of the SD Program is the identification of a pool of funds that require less liquidity than that provided by the HQL Program. It is anticipated that the majority of CalPERS sub-strategies desiring limited-duration assets will use both the HQL Program and SD Program at various times depending on liquidity needs.
3. The Policy for the Dollar-Denominated Fixed Income, Short Duration Program is Attachment A2.

**DOLLAR-DENOMINATED FIXED INCOME  
HIGH QUALITY LIBOR PROGRAM**

**May 12, 2008**

**I. PERFORMANCE OBJECTIVE AND BENCHMARK**

The performance objective for the Dollar-Denominated Fixed Income [High Quality LIBOR](#) Program ("HQL Program") is to exceed the return of a [Federal Funds](#) based index while maintaining a high level of diversification and liquidity.

**II. INVESTMENT APPROACHES AND PARAMETERS**

**A. Investment Approach**

Identifying opportunities across limited duration [bond](#) market sectors and investing where risks are both understood and manageable while maintaining credit quality, [duration](#), [convexity](#), and liquidity as specified in the High Quality Libor Policy ("Policy") is the investment approach of the HQL Program. Given the mandate for the HQL Program to be a high liquidity, preservation of capital fund, measured versus a Federal Funds based benchmark, it is expected that AAA rated [Floating Rate Securities](#) will represent a majority of the HQL Program holdings.

**B. Specific Risk Parameters**

CalPERS shall manage the following major categories of fixed income risk:

1. [Benchmark Risk](#) was reviewed by the Consultant who determined that the Federal Funds based index was the appropriate reference point.
2. [Interest Rate Risk](#) will be controlled by limiting duration to not exceed 90 days due to the stable return mandate of the HQL Program. Decisions shall be managed using historical [real return relationships](#) and [economic analysis](#).

**Maturity and Duration Constraints**

<b>Asset</b>	<b>Maturity Limits</b>
US Treasury & Govt. Sponsored	91 days
<a href="#">Repurchase Agreements</a>	
US Treasury/ <a href="#">Agency</a> Collateral	3 months
Non US Treasury/ <a href="#">Agency</a> Collateral	1 month
AAA Rated Fixed Rate <a href="#">Structured Securities</a>	90 day WAL
AAA Rated Floating Rate Structured Securities	5 year WAL
<a href="#">Money Market Securities</a>	
> = A1/P1	90 days
< A1/P1	35 days
<a href="#">Corporate</a> & <a href="#">Yankee Sovereign</a> (AAA rated)	90 days
Corporate & Yankee Sovereign (less than AAA rated)	35 days

3. [Yield Curve Risk](#) must be managed in a controlled, disciplined fashion by employing [break-even](#), economic analysis, [partial duration](#), and [principal component analysis](#).
4. [Convexity Risk](#) must be managed using [option-adjusted](#) and [scenario analyses](#).
5. [Sector Risk](#) and [Asset Risk](#) will be controlled using the below ranges. Based on the economic outlook, [historical factors](#), and break-even analysis, Staff shall estimate the impact on various sectors' and assets' spreads and make allocations accordingly.

**Asset and Sector Diversification**

<b>Asset / Counterparty</b>	<b>Diversification Limits</b>
US Treasury & Govt. Sponsored	No Restriction
2a-7 <a href="#">Money Market Funds</a>	No Restriction
<a href="#">State Street Bank's STIF</a>	No Restriction
Repurchase Agreements	25%
AAA Rated Structured Securities	10%
Corporate & Yankee <a href="#">Sovereign</a> (AAA rated)	10%
Corporate & Yankee Sovereign (less than AAA rated)	5%
<a href="#">Money Market Securities</a>	
> = A1/P1 (next business day maturity)	15%
> = A1/P1	10%
< A1/P1 (next business day maturity)	10%
< A1/P1	5%



Sector	Diversification Limits
<a href="#">Floating Rate</a>	No Restriction
Fixed Rate (greater than 35 day maturity)	20%
US Treasury & Govt. Sponsored	No Restriction
2a-7 Money Market Funds	No Restriction
State Street Bank's STIF	No Restriction
Repurchase Agreements	No Restriction
AAA Rated Fixed Rate Structured Securities	20%
AAA Rated Floating Rate Structured Securities	No Restriction
Credit Card Collateral	75%
Auto Collateral	75%
Student Loan Collateral	75%
Any Other Individual Structured Collateral Sector	50%
Any One <a href="#">Corporate Sector</a>	15%
Total Yankee Sovereign Sector	15%
Total Corporate/Yankee Sovereign	50%
Money Market Securities	
> = A1/P1	No Restriction
< A1/P1 (next business day maturity)	50%
< A1/P1	25%

6. [Credit Risk](#) will be controlled by requiring minimum [ratings](#) by asset type, outlined in the table below. A downgrading of a security, which causes a violation in the guidelines, shall not require an immediate sale if the [Senior Investment Officer](#) of Global Fixed Income believes that no further risk of credit deterioration exists or the sale diminishes the total return to CalPERS. The CalPERS internal research staff and the external rating agencies shall analyze such situations to ensure that an informed decision is made. The following is the minimum quality for each of the sectors.

Asset / Counterparty	Minimum <a href="#">Credit Rating</a>
US Treasury & Govt. Sponsored	AAA
Repurchase Agreements	A1/P1
Structured Securities	AAA
Money Market Securities	A2/P2
Corporate Securities	Baa1/BBB+
Yankee Sovereign Securities	A3/A-

7. [Structure Risk](#) must be managed using option-adjusted and scenario analysis.
8. [Reinvestment Risk](#) must be managed through [call risk](#) and cash flow analysis.
9. [Liquidity Risk](#) is reduced due to the requirement of the HQL Program's mandate as a liquid, limited duration program, and high liquidity.
10. [Currency Risk](#) is reduced by requiring all securities to be denominated in U.S. dollars.

**C. Restrictions and Prohibitions**

1. Except for U.S. Treasuries and Agencies, investments in a AAA-rated single [issuer](#) with a maturity that exceeds one business day shall not exceed 10% of the HQL Program during the holding period for such investment. Exceptions to this restriction are 2a-7 money market funds, State Street Bank's STIF, and repurchase agreements (See Section II.B.5.) For structured securities, each separate trust (pool of assets) is defined as a separate issuer.
2. Investments in any non-AAA rated single issuer with a maturity that exceeds one business day shall not exceed 5% of the HQL Program during the holding period for such investment.
3. The option-adjusted duration of the HQL Program shall not exceed 90 days.
4. Non-investment grade securities are prohibited.
5. [Collateralized Bond Obligation](#) (CBO) and [Collateralized Loan Obligation](#) (CLO) investments are prohibited.
6. Tobacco company investments are prohibited.
7. [Privately Placed Investment Grade](#) Corporate Bonds are prohibited.
8. [Collateralized Mortgage Obligations](#) (CMO) are prohibited.
9. [Adjustable rate securities](#), which are not allowed, include but are not limited to, the following:

- a. [Inverse floaters](#), leveraged floaters and any securities whose interest rate reset provisions are based on a formula that magnifies changes in interest rates.
- b. Constant Maturity Treasury (CMT) floaters and securities whose interest rate reset provisions are tied to long-term interest rates so that a change in the slope of the [yield curve](#) could result in the value of the instrument falling below par.
- c. Dual Index Floaters and securities whose interest reset provisions are tied to more than one index so that a change in the relationship between these indices may result in the value of the instrument falling below par.
- d. Cost of Funds Index (COFI) floaters, prime floaters, and securities whose interest rate reset provision is tied to an index materially lagging short-term interest rates.

#### **D. Authorized Securities**

- 1. U.S. Treasury and [Government Sponsored Securities](#) (including derivative securities whose deliverable instrument is a U.S. Treasury or government obligation) excluding mortgages and [mortgage-backed securities \(MBS\)](#).
- 2. Money market instruments, including obligations of the U.S. Government and its agencies, and domestic money market instruments ([Commercial Paper](#), bank time deposits, [Certificates of Deposit](#), and [Banker's Acceptances](#)). Non-domestically domiciled money market issuers must be domiciled in countries defined in the Master Glossary under Yankee Sovereign.
- 3. Repurchase Agreements and [Tri-Party Repurchase Agreements](#) (repos and tri-party repos) collateralized at 102% by debt obligations of the U.S. Government or its agencies (this does not include mortgage-backed securities). Repurchase agreements and Tri-Party Repurchase agreements collateralized at 105% by A3/A- or higher rated corporate debt or AAA structured securities or commercial paper with a minimum A1/P1 rating. Repurchase agreements and Tri-Party Repurchase agreements collateralized at 105% by common stock of companies included in one of the following indices: Nasdaq composite, Russell 3000, or the S&P 500. Individual common stock concentration is limited to 5% per issuer. Repurchase agreements and Tri-Party Repurchase agreements must be [marked-to-market](#) daily. Repurchase agreements and Tri-Party Repurchase agreements must be with counterparties rated at least A1/P1.

Mortgage-backed securities are prohibited. Collateral for Tri-party repurchase agreements must be a minimum of \$1 million in size.

Guidelines for Eligible Repo Counterparties can be found in Attachment A3.

4. [Notes](#), bonds, and debentures issued by the U.S. Government and its agencies, U.S. corporations, Canadian, [Supranational](#), and Yankee Sovereign entities subject to the maturity and credit quality limitations specified in this Policy.
5. Money market funds as defined under SEC Regulation 270.2a-7.
6. Structured securities with a minimum credit rating of AAA. Subject to the maturity constraints specified in this Policy.
7. [Floating rate](#) and [variable rate securities](#), subject to maturity, credit quality, and reset limitations specified in this Policy. The HQL Program can invest in [adjustable rate securities](#) tied to [LIBOR](#), [Fed Funds](#), Treasury Bills, and Commercial Paper Indices.
8. Derivatives, subject to Section IV.

### III. CALCULATIONS AND COMPUTATIONS

- A. For securities with periodic principal payments, the [weighted-average days to maturity](#) must be calculated from the [evaluation date](#) to the date of the security's [average life](#).
- B. The HQL Program weighted-average days to maturity must be calculated from the evaluation date to the date of the next coupon reset for floating rate securities.

### IV. DERIVATIVES AND LEVERAGE POLICY

All transactions involving [derivatives](#) and [leverage](#) are governed by CalPERS' Statement of Investment Policy for Development of Derivatives Strategies. In addition to the restrictions defined in the Derivatives Policy, the following conditions apply specifically to the HQL Program.

- A. [Financial Futures](#), [Swaps](#), and [Options](#)
  1. [Short selling](#) of securities is prohibited, except in financial futures (as outlined in Section IV. A. 4.);

2. Leverage is prohibited except [futures](#) position where there is an associated cash position (which effectively creates a synthetic bond);
3. The Staff may buy or sell the following fixed income related derivatives: financial futures including [eurodollar futures](#), [total return swaps](#), [index swaps](#), [credit default swaps](#), [interest rate swaps](#), and [over-the-counter](#) options; and
4. Acceptable strategies include bona fide [hedges](#) (to help achieve the target durations) and strategies that result in a more efficient method of implementing the investment objectives of the HQL Program.

**B. Restrictions and Prohibitions**

1. [Uncovered Call](#) writing is prohibited.
2. [Speculation](#) or [arbitrage](#) between two derivatives is prohibited. If a derivative is more attractively priced than the underlying security, the transaction is considered a substitution.

**C. Counterparty Exposure for Options, Swaps and Futures**

Transactions shall be executed with only domestic or non-U.S. brokers registered in the U.S. or the U.K. with a short-term debt rating of at least A1 ([S&P](#)) and at least P1 ([Moody's](#)), or rated on a long-term at least A3 (Moody's) and at least A- (S&P). CalPERS' internal research staff shall actively review these brokers.

**DOLLAR-DENOMINATED FIXED INCOME  
SHORT DURATION PROGRAM**

**May 12, 2008**

**I. PERFORMANCE OBJECTIVE AND BENCHMARK**

The performance objective of the Dollar-Denominated Fixed Income [Short Duration Program](#) ("SD Program") is to exceed the return of a [Federal Funds](#) based index while maintaining a high level of diversification and prudent liquidity.

**II. INVESTMENT APPROACHES AND PARAMETERS**

**A. Investment Approach**

Identifying opportunities across limited duration [bond](#) market sectors and investing where risks are both understood and manageable while maintaining credit quality, [duration](#), [convexity](#), and liquidity as specified in this Policy is the investment approach of the Short Duration Program. Given the mandate for the SD Program to be a medium liquidity, total rate of return program, measured versus a Federal Funds based benchmark, it is expected that AAA rated [Floating Rate Securities](#) will represent a majority of the SD Program holdings.

**B. Specific Risk Parameters**

CalPERS shall manage the following major categories of fixed income risk:

1. [Benchmark Risk](#) was reviewed by the Consultant who determined that the Federal Funds based index was the appropriate reference point.
2. [Interest Rate Risk](#) must be controlled by limiting the SD Program's duration to not exceed 180 days and by limiting duration by the asset type through the table below. Decisions shall be managed using historical [real return relationships](#) and [economic analysis](#).

### Maturity and Duration Constraints

Asset	Floating Rate Maturity Limits	Fixed Rate Maturity Limits
US Treasury & Govt. Sponsored		2 years
<a href="#">Repurchase Agreements</a>		
US Treasury/ <a href="#">Agency</a> Collateral	3 months	
Non US Treasury/Agency Collateral	1 month	
AAA Rated <a href="#">Structured Securities</a>	7 year WAL	2 year WAL
Non-AAA Rated Structured Securities	5 year WAL	18 month WAL
<i>Note: Mortgage-backed securities maximum WAL calculation to be run at 100 <a href="#">PSA</a></i>		
<a href="#">Money Market Securities</a>		
> = A1/P1		270 days
< A1/P1		90 days
<a href="#">Corporate</a> & Yankee <a href="#">Sovereign</a> (AAA rated)	5 Years	2 years
Corporate & <a href="#">Yankee Sovereign</a> (less than AAA rated)	4 Years	8 months

3. [Yield Curve Risk](#) must be managed in a controlled, disciplined fashion by employing [break-even](#), economic analysis, [partial duration](#), and [principal component analysis](#).
4. [Convexity Risk](#) must be managed using [option-adjusted](#) and [scenario analyses](#).
5. [Sector Risk](#) and [Asset Risk](#) will be controlled using the table below. Based on the economic outlook, [historical factors](#), and break-even analysis, Staff shall estimate the impact on various sectors' and assets' spreads and make allocations accordingly.

**Asset and Sector Diversification**

<b>Asset / Counterparty</b>	<b>Diversification Limits</b>
US Treasury & Govt. Sponsored	No Restriction
2a-7 <a href="#">Money Market Funds</a>	No Restriction
<a href="#">State Street Bank's STIF</a>	No Restriction
Repurchase Agreements	25%
AAA Rated Structured Securities	
Less than or = 1.5 year WAL	15%
Greater than 1.5 year WAL	10%
Non-AAA Rated Structured Securities	5%
Corporate & Yankee Sovereign (AAA rated)	10%
Corporate & Yankee Sovereign (less than AAA rated)	5%
Money Market Securities	
> = A1/P1 (next business day maturity)	15%
> = A1/P1	10%
< A1/P1 (next business day maturity)	10%
< A1/P1	5%

<b>Sector</b>	<b>Sector Limits</b>
Floating Rate	No Restriction
Fixed Rate (greater than 35 day WAL)	35%
Non-AAA Rated Securities	50%
US Treasury & Govt. Sponsored	No Restriction
2a-7 Money Market Funds	No Restriction
State Street Bank's STIF	No Restriction
Repurchase Agreements	No Restriction
AAA Rated Structured Securities	No Restriction
Credit Card Collateral	75%
Auto Collateral	75%
Student Loan Collateral	75%
Home Equity Loan Collateral	75%
Any Other Individual Structured Collateral Sector	50%
Non-AAA Rated Structured Securities	
Each Sector (e.g., credit card, auto)	20%
Any One <a href="#">Corporate Sector</a>	15%
Total Yankee Sovereign Sector	15%
Total Corporate/Yankee Sovereign	50%
Money Market <a href="#">Securities</a>	
> = A1/P1	No Restriction
< A1/P1 (next business day maturity)	50%
< A1/P1	25%



6. [Credit Risk](#) will be controlled by requiring minimum [ratings](#) by asset type as outlined in the table below. Credit Risk shall be actively managed on a risk/return basis. A downgrading of a security, which causes a violation in the guidelines, shall not require an immediate sale if the [Senior Investment Officer](#) of Global Fixed Income believes that no further risk of credit deterioration exists or the sale diminishes the total return to CalPERS. The CalPERS internal research staff and the external rating agencies shall analyze such situations to ensure that an informed decision is made. The following is the minimum quality for each of the sectors.

Asset / Counterparty	Minimum <a href="#">Credit Rating</a>
US Treasury & Govt. Sponsored	AAA
Repurchase Agreements	A1/P1
Structured Securities	Baa2 or BBB
Money Market Securities	A2/P2
Corporate Securities	Baa1/BBB+
Yankee Sovereign Securities	A3/A-

7. [Structure Risk](#) must be managed using option-adjusted and scenario analysis.
8. [Reinvestment Risk](#) must be managed through [call risk](#) and cash flow analysis.
9. [Liquidity Risk](#) is reduced through the SD Program's mandate as a limited duration program that will provide prudent liquidity.
10. [Currency Risk](#) is reduced by requiring all securities to be denominated in U.S. dollars.

### C. Restrictions and Prohibitions

1. Except for U.S. Treasuries and Agencies, investments in a AAA-rated single [issuer](#) with a maturity that exceeds one business day shall not exceed 10% of the SD Program during the holding period for such investment. Exceptions to this restriction are 2a-7 money market funds, State Street Bank's STIF, repurchase agreements and structured securities that have average lives less than or equal to 1.5 years (Section II. B. 5.) For structured securities, each separate trust (pool of assets) is defined as a separate issuer.

2. Investments in any non-AAA rated single issuer with a maturity that exceeds one business day shall not exceed 5% of the SD Program during the holding period for such investment. For structured securities, each separate trust (pool of assets) is defined as a separate issuer.
3. The option-adjusted duration of the SD Program must not exceed 180 days.
4. Non-investment grade securities are prohibited.
5. Tobacco company investments are prohibited.
6. [Privately Placed Investment Grade](#) Corporate Bonds are prohibited.
7. [Adjustable rate securities](#), which are not allowed include, but are not limited to, the following:
  - a. [Inverse floaters](#), leveraged floaters and any securities whose interest rate reset provisions are based on a formula that magnifies changes in interest rates.
  - b. Constant Maturity Treasury (CMT) floaters and securities whose interest rate reset provisions are tied to long-term interest rates so that a change in the slope of the [yield curve](#) could result in the value of the instrument falling below par.
  - c. Dual Index Floaters and securities whose interest reset provisions are tied to more than one index so that a change in the relationship between these indices may result in the value of the instrument falling below par.
  - d. Cost of Funds Index (COFI) floaters, and securities whose interest rate reset provision is tied to an index materially lagging short-term interest rates.

**D. Authorized Securities**

1. U.S. Treasury and [Government Sponsored Securities](#) (including derivative securities whose deliverable instrument is a U.S. Treasury or government obligation) excluding mortgages and [mortgage-backed securities](#) (MBS).
2. Money market instruments, including obligations of the U.S. Government and its agencies, and domestic money market instruments ([Commercial Paper](#), bank time deposits, [Certificates of](#)

[Deposit](#), and [Banker's Acceptances](#)). Non-domestically domiciled money market issuers must be domiciled in countries defined in the Master Glossary under Yankee Sovereign.

3. Repurchase Agreements and [Tri-Party Repurchase Agreements](#) (repos and tri-party repos) collateralized at 102% by debt obligations of the U.S. Government or its agencies (this does not include mortgage-backed securities). Repurchase agreements and Tri-Party Repurchase agreements collateralized at 105% by A3/A- or higher rated corporate debt or AAA structured securities or commercial paper with a minimum A1/P1 rating. Repurchase agreements and Tri-Party Repurchase agreements collateralized at 105% by common stock of companies included in one of the following indices: Nasdaq composite, Russell 3000, or the S&P 500. Individual common stock concentration is limited to 5% per issuer. Repurchase agreements and Tri-Party Repurchase agreements must be marked-to-market daily. Repurchase agreements and Tri-Party Repurchase agreements must be with counterparties rated at least A1/P1. Mortgage-backed securities are prohibited. Collateral for Tri-party repurchase agreements must be a minimum of \$1 million in size.

Guidelines for Eligible Repo Counterparties can be found in Attachment A3.

4. [Notes](#), [bonds](#), and debentures issued by the U.S. Government and its agencies, U.S. corporations, Canadian, [supranational](#), and Yankee Sovereign entities subject to the maturity and credit quality limitations specified in this Policy.
5. Money market funds as defined under SEC Regulation 270.2a-7.
6. Structured securities with a minimum credit rating of Baa2/BBB. Subject to the maturity constraints detailed in this Policy.
7. Floating rate and [variable rate securities](#), subject to maturity, credit quality, and reset limitations specified in this Policy. The SD Program can invest in adjustable rate securities tied to [LIBOR](#), [Fed Funds](#), Treasury Bills, and Commercial Paper Indices.
8. [Participation shares in CalPERS construction loan program](#) with BRIDGE Housing Corporation.
9. CalPERS Asset-Based Loan (ABL) program investments.
10. Derivatives, subject to the requirements of Section IV.

### III. CALCULATIONS AND COMPUTATIONS

- A. For securities with periodic principal payments, the [weighted-average days to maturity](#) must be calculated from the [evaluation date](#) to the date of the security's [average life](#).
- B. The SD Program weighted-average days to maturity must be calculated from the evaluation date to the date of the next coupon reset for floating rate securities.

### IV. DERIVATIVES AND LEVERAGE POLICY

All transactions involving [derivatives](#) and [leverage](#) are governed by CalPERS' Statement of Investment Policy for Development of Derivatives Strategies. In addition to the restrictions defined in the Derivatives Policy, the following conditions apply specifically to the SD Program.

#### A. [Financial Futures](#), [Swaps](#), and [Options](#)

- 1. [Short selling](#) of securities is prohibited, except in financial futures (as outlined in Section IV. A. 4);
- 2. Leverage is prohibited except [futures](#) position where there is an associated cash position (which effectively creates a synthetic bond);
- 3. Staff may buy or sell the following fixed income related derivatives: financial futures including [eurodollar futures](#), [total return swaps](#), [index swaps](#), [credit default swaps](#), [interest rate swaps](#), and [over-the-counter](#) options; and
- 4. Acceptable strategies include bona fide [hedges](#) (to help achieve the target durations) and strategies that result in a more efficient method of implementing the investment objectives of the SD Program.

#### B. Restrictions and Prohibitions

- 1. [Uncovered Call](#) writing is prohibited.
- 2. [Speculation](#) or [arbitrage](#) between two derivatives is prohibited. If a derivative is more attractively priced than the underlying security, the transaction is considered a substitution.

#### C. Counterparty Exposure for Options, Swaps and Futures

Transactions shall be executed with only domestic or non-U.S. brokers registered in the U.S. or the U.K. with a short-term debt rating of at least A1

([S&P](#)) and at least P1 ([Moody's](#)), or rated on a long-term basis at least A3 (Moody's) and at least A- (S&P). CalPERS' internal research staff shall actively review these brokers.

**ELIGIBLE REPO COUNTERPARTIES**  
**Effective September 14, 2006**

**Repo counterparties may include the following:**

1. Any bank or broker/dealer explicitly rated A1/P1/F1 by at least two of the three rating agencies. In the case of split [ratings](#), measure against the lowest of the three ratings.
2. Any bank branch whose parent is rated A1/P1/F1 (by at least two out of the three agencies).
3. Any subsidiary of a parent entity rated A1/P1/F1 carrying a guarantee of the parent.
4. If an entity is not explicitly rated, is not a bank branch, and does not carry a parental guaranty, then the entity must be a Primary Government Securities Dealer (as listed on the Federal Reserve Bank of New York's Primary Dealer List located at: [http://www.ny.frb.org/markets/pridealers\\_current.html](http://www.ny.frb.org/markets/pridealers_current.html)),

and

The parent entity must be rated A1/P1/F1 by two of the three rating agencies.

In all cases, ratings must be issued by two out of the three agencies; in the case of split ratings, measure against the lowest of the three ratings.

**SPECIFIC REPO COUNTERPARTIES**

Eligible Counterparties include the names listed below. These may be amended at any time provided they comply with above guidelines.

	<b>Explicit Rating</b>	<b>Primary Dealer</b>	<b>Parent Rating</b>
Banc of America Securities, LLC.	A1+/P1	Yes	A1+/P-1
Barclays Capital Inc.	No	Yes	A1+/P1
BNP Paribas Securities Corp.	No	Yes	A1+/P-1
Citigroup Global Markets Inc.	A1+/P1	Yes	A1+/P-1
Credit Suisse Securities (USA) LLC	No	Yes	A1+/P1
Deutsche Bank Securities Inc.	P1	Yes	A1+/P-1
Dresdner Kleinwort Wasserstein Securities LLC	No	Yes	A-1/P-1
Goldman, Sachs & Company	A1+/P-1	Yes	A-1+/P1
HSBC Securities (USA) Inc.	No	Yes	A-1+/P1
JP Morgan Securities Inc.	No	Yes	A-1+/P1
Lehman Brothers, Inc.	A1+/P-1	Yes	A1/P1
Merrill Lynch Government Securities Inc.	No	Yes	A1/P1
Morgan Stanley & Co. Incorporated	No	Yes	A1+*/P1
RBS/Greenwich Capital Markets, Inc.	No	Yes	A1+/P-1
UBS Securities LLC	A1+	Yes	A1+/P-1

**As of March 30, 2008**

\*Morgan Stanley S&P A-1+ rating is on negative watch

## INTERNALLY MANAGED DOLLAR-DENOMINATED SHORT-TERM PROGRAM

May 12, 2008

### I. PERFORMANCE OBJECTIVE AND BENCHMARK

The performance objective for the Dollar-Denominated Short-Term Program ("ST Program") is to exceed the benchmark which is the total rate of return of the [State Street Bank Short-Term Investment Fund](#) ("SSB STIF") after investment management fees.

### II. INVESTMENT APPROACHES AND PARAMETERS

#### A. Investment Approach

The goals of the ST Program are to provide liquidity to CalPERS and to maximize investment returns at a prudent level of risk. The investment approach is to identify opportunities in the short end of the [yield curve](#) and invest where risks are understood and manageable, while maintaining liquidity, credit quality, [weighted-average days to maturity](#), and diversification as specified in this Policy.

To ensure liquidity, all ST Program investment transactions shall be made in conjunction with CalPERS' projected cash flow needs.

#### B. Specific Risk Parameters

CalPERS shall manage the following major categories of short-term risk:

1. [Benchmark Risk](#) was reviewed by the Consultant who determined that the SSB STIF is the appropriate reference point for the ST Program.
2. [Liquidity Risk](#) must be managed within the context of CalPERS' projected cash flow needs.
3. [Interest Rate Risk](#) must be managed using [economic analysis](#), [Federal Open Market Committee](#) analysis, and projected cash flow requirements of CalPERS. All securities purchased shall have a maximum final stated maturity of 15 months **except** for the following securities:
  - a. [Callable securities](#) having a high probability of being "called" as projected using [option-adjusted](#) and [scenario analysis](#).



- Callable [securities](#) shall have a maximum anticipated time to call of 12 months.
- b. Fixed rate [asset-backed securities](#) shall have a maximum projected [average life](#) of 15 months and a final stated maturity that does not exceed 5 years.
  - c. Floating rate asset-backed securities shall have a maximum projected average life of 3 years and a final stated maturity that does not exceed 5 years.
  - d. [Corporate](#) and U.S. Government [Agency floating rate securities](#) shall have a final stated maturity not exceeding 3 years.
  - e. Securities with short-term [ratings](#) that are [split-rated](#) shall have a maximum final stated maturity of 120 days (including floating rate securities).
  - f. Securities rated A2/P2 shall have a maximum final stated maturity of 75 days (including floating rate securities).
  - g. [Deliveries versus payment repurchase agreements](#) (DVP Repo) are limited to a maximum of 14 days from the trade date to the date of repurchase.
  - h. Investments in short-term obligations of issuers domiciled outside the United States shall have a maximum final stated maturity of 120 days.
4. [Yield Curve Risk](#) must be managed in a controlled, disciplined fashion by employing [break-even](#) and economic analysis.
5. [Credit Risk](#) must be managed with a goal of zero [defaults](#). A downgrading of a security, which causes a violation of the Policy, shall not require an immediate sale if the [Senior Investment Officer](#) of Global Fixed Income believes that no further risk of credit deterioration exists, or that the sale diminishes the total rate of return to CalPERS. CalPERS' internal research staff and the external rating agencies shall be utilized in analyzing such situations to ensure that an informed decision is made. The following are minimum credit quality standards for each of the sectors:
- a. U.S. Treasury & U.S. Government Agency securities shall have a credit quality rating of AAA.

- b. Asset-backed securities must be in the highest rating category for short-term debt obligations (A1+/P1 or A1/P1) or rated on a long-term debt obligation basis by [Moody's](#) (Aaa) and [S&P](#) (AAA).
  - c. Broker/dealer securities must be in the highest rating category for short-term debt obligations (A1+/P1 or A1/P1).
  - d. Domestic [money market securities](#) must be in one of the two highest rating categories for short-term debt obligations (A2/P2 or higher). If the security is only rated by one of the credit agencies (S&P or Moody's) then the security must be in the highest rating category for short-term debt obligations (A1+, A1 or P1). All corporate issuers with a short-term rating below A1/P1 shall be monitored by the CalPERS internal research staff annually or as events warrant.
  - e. Domestic corporate securities ([bonds](#), [notes](#), [medium term notes](#), and floating rate securities) without a short-term debt obligation rating must have a minimum long-term debt obligation rating by Moody's of A2 and by S&P of A.
  - f. Investments in U.S. Dollar bonds and money market securities issued in the United States by foreign borrowers ([Yankee](#)) or U.S. Dollar bonds and money market securities issued outside the United States by domestic or foreign borrowers ([Eurodollar](#)) must be debt obligations of companies located in a country with a long-term [sovereign](#) rating by Moody's of Aa3 (or higher) and by S&P AA- (or higher) and have a short-term rating of A1/P1 (or higher).
- 6. [Structure Risk](#) must be managed using option adjusted and scenario analysis.
  - 7. [Reinvestment Risk](#) must be managed through [call risk](#) and cash flow analysis.

**C. Authorized Securities**

- 1. U.S. Treasury and U.S. Government Agencies including U.S. Treasury strips;
- 2. Publicly traded domestic corporate bonds, notes, and medium term notes;

3. Asset-backed securities collateralized by credit cards, automobile loans, or leases and agricultural equipment;
4. Publicly and [privately traded domestic money market securities](#);
5. Floating rate securities tied to [LIBOR](#), [Fed Funds](#), Treasury bills and [commercial paper](#) indices;
6. [State Street Bank Short Term Investment Fund](#) (STIF);
7. DVP Repos;
8. Broker/Dealer Securities;
9. U.S. Dollar bonds and money market securities issued in the United States by foreign borrowers (Yankee); and
10. U.S. Dollar bonds and money market securities issued outside the United States by domestic or foreign borrowers (Eurodollar).

**D. Restrictions and Prohibitions**

1. Investments in a single [issuer](#) (including parent, subsidiary and guaranteed debt) whose securities are rated A1+/P1 or A1/P1, shall not exceed 10% of the ST Program over the holding period for such investments. However, holdings in such issuers with maturities in excess of 7 days shall not exceed 5% of the ST Program. For asset-backed securities, each separate trust (pool of assets) is defined as a separate issuer.
2. Investments in a single issuer (including parent, subsidiary and guaranteed debt) whose securities are [split-rated](#) (A2/P1 or A1/P2), shall not exceed 6% of the ST Program over the holding period for such investments. However, holdings in such issuers with maturities exceeding 7 days shall not exceed 3% of the ST Program.
3. Investments in a single issuer (including parent, subsidiary and guaranteed debt) whose securities are rated A2/P2, shall not exceed 4% of the ST Program over the holding period for such investments. However, holdings in such issuers with maturities exceeding 7 days shall not exceed 2% of the ST Program.
4. Aggregate investments in securities split-rated or A2/P2 shall not exceed 30% of the ST Program over the holding period for such investments.

5. Aggregate investments in floating rate securities shall not exceed 50% of the ST Program over the holding period for such investments.
6. Aggregate investments in fixed rate asset-backed securities shall not exceed 25% of the ST Program over the holding period for such investments.
7. Aggregate investments in DVP Repos with maturities exceeding the next business day shall not exceed 20% of the ST Program.
8. [Tri-party repurchase agreements](#) are prohibited.
9. Non-dollar denominated securities are prohibited.
10. [Collateralized mortgage obligations](#) and [mortgage-backed securities](#) are prohibited.
11. [Financial futures](#) and [options](#) are prohibited.

**E. Counterparty Exposure for DVP Repos**

1. The lesser of \$200 million or 25% of the total ST Program can be maintained with any one counterparty for DVP Repos.
2. The counterparty must be in the highest rating category for short-term debt obligations (A1+/P1 or A1/P1). Transactions shall be executed with only domestic brokers. The CalPERS internal research staff shall actively review these brokers.
3. Collateral received on a [repurchase agreement](#) must consist of U.S. Treasury or U.S. Government Agency securities with a maximum final stated maturity of 5 years. All collateral must be marked-to-market on a daily basis and maintained at 102% of the amount of funds loaned plus accrued interest.

**III. CALCULATIONS AND COMPUTATIONS**

- A. Calculations and computations shall be on a [mark-to-market](#) or [amortized cost method](#) depending on market convention. Securities for which there are market quotations readily available shall be accounted for utilizing the mark-to-market method. When no market quote is available, the amortized cost method shall be used for determining the securities value.
- B. For securities with periodic principal payments, the weighted-average days to maturity calculation shall be calculated from the [evaluation date](#) to the date of the security's average life.

- C. For floating rate securities, the program weighted-average days to maturity calculation shall be calculated from the evaluation date to the date of the next coupon reset.
- D. References to short-term [credit ratings](#) shall be presented with S&P rating first followed by Moody's (i.e., S&P (A1) and Moody's (P1) shall be presented as A1/P1).

SHORT DURATION PROGRAMS COMPARISON

